

## Focused on the Future

Over 7 times faster and with 15 times more capacity than the previous models, these new NEXEDGE repeaters represent a breakthrough in performance. Extensive data storage means they can support everything from analog/digital conventional systems up to a highly sophisticated NEXEDGE Generation2 (Gen2) multi-site digital trunked network. And further adding to their future-proof credentials is upcoming support for Digital Simulcast. Stay ahead of the curve, with cutting-edge communications.

### ● GENERAL FEATURES

- Wideband Coverage
- 25/5/0.5 W RF Output Power (100% Duty Cycle)
- Two-Digit Numeric Display
- LED Status Indicators
- USB 2.0 Type-B Interface
- IP LAN/WAN Connectivity
- Ethernet Network Interface
- 6 Programmable Function Keys
- 0.3 W Front Panel Speaker
- 3 W External Speaker Audio
- Volume Control
- Program / Modem Interface
- Remote Termination Interface
- Programmable AUX I/O's
- DTMF Remote Control
- Flash Firmware Upgrading
- Remote System Firmware Updates
- Telephone Interconnect Option

### ● DIGITAL – GENERAL

- NXDN Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Bandwidth
- Built-In 0.5 ppm TCXO
- OXCO Unit Option (KXK-3)
- UID & GID Validation
- NXR Over-the-Air Alias
- SNMP Protocol Ready
- FER (Frame Error Rate) / RSSI Output

### ● DIGITAL – TRUNKING MODE

- NEXEDGE Gen2 Network
  - \* NXDN Type-C Trunking (Gen1) will be supported later
- Transmission Trunked Mode
- Message Trunked Mode
- Busy Call Queuing
- Call Queue Pre-emption
- Late Entry (UID & GID)
- Control / Traffic Channel Switching
- Control Channel Rotation

- Cross-Busy
- Failsoft Mode
- NXDN Traffic Channel Sharing
- ESN Validation
- Auto-Roaming / Registration
- Wide Area All Group Call

### ● DIGITAL – CONVENTIONAL MODE

- Mixed FM / Digital Operation
- Conventional IP Networks
- Site Roaming Capability
- Digital Simulcast  
(To be supported in future)

### ● FM ANALOG MODE

- 16 QT/DQTs Repeater Control Built-in
- Hang Timer / Time Out Timer / CW ID
- External FM Controller Interface
- EIA Voter Tone Generation
- External LTR® Controller Interface
- External MPT1327 Controller Interface



## OPTIONAL ACCESSORIES

■ **KXK-3**  
OCXO UNIT



■ **KMC-30**  
MICROPHONE



■ **KMC-35**  
MICROPHONE



■ **KTI-4**  
TELEPHONE INTERCONNECT ADAPTER



All accessories and options may not be available in all markets. Contact our authorized dealer for details and complete list of all accessories and options.

## SPECIFICATIONS

GENERAL		NXR-5700	NXR-5800
Frequency Range	Type 1	136-174 MHz	450-520 MHz
	Type 2		400-470 MHz
	Type 3		350-400 MHz
Channel Spacing	Analog	30*/25*/15/12.5 kHz	25*/12.5 kHz
	Digital	12.5/6.25 kHz	12.5/6.25 kHz
PLL Channel Step		6.25/5/3.125/2.5 kHz	6.25/5/3.125 kHz
Frequency Stability	Radio only	± 0.5 ppm	
	With KXK-3 (M2)	± 1.0 ppm	
	With KXK-3 (M3)	± 0.1 ppm	
Operating Voltage		13.6 V DC ± 15 %	
Operating Temperature Range		-22 °F to +140 °F (-30 °C to +60 °C)	
Antenna Impedance		50 Ω	
Dimensions (W x H x D), Projections not included		19.02 x 1.73 x 13.03 in (483 x 44 x 331 mm)	
Weight (net)		11 lb (5 kg)	
FCC ID	Type 1	K44474500	K44474600
	Type 2	—	K44474601
IC Certification	Type 1	282F-474500	—
	Type 2	—	282F-474601

\*25 and 30 kHz are not included in the models sold in the USA or US territories. Measurements made per CAI measurement procedures (digital) and TIA-603 (analog); specifications are typical. Details and timing of firmware and software updates are subject to change without notice. Specifications are subject to change without notice, due to advancements in technology.

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NXDN is a trademark of JVCKENWOOD Corporation and Icom Inc.

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RECEIVER		NXR-5700	NXR-5800
Sensitivity	Digital @ 6.25 kHz (3 % BER)	0.27 μV	
	Digital @ 12.5 kHz (3 % BER)	0.33 μV	
	Analog (12 dB SINAD)	0.30 μV	
Selectivity	Analog @ 25/30 kHz*	92 dB (± 30 kHz)	86 dB (± 25 kHz)
	Analog @ 12.5 kHz	84 dB (± 12.5 kHz)	80 dB (± 12.5 kHz)
FM Hum & Noise	Analog @ 25/30 kHz*	55 dB	
	Analog @ 12.5 kHz	50 dB	
Intermodulation Distortion		85 dB (± 50/100 kHz)	
Spurious Response		100 dB	
Audio Distortion (Ext. SP)		Less than 2 % (at 0.3 W)	
Audio Output (Ext. SP)		3 W (at 4 Ω, less than 5 % distortion)	
TRANSMITTER		NXR-5700	NXR-5800
RF Power Output		25/5/0.5 W	
Max Duty Cycle		100 %	
Spurious & Harmonics		73 dB	
FM Hum & Noise	Analog @ 25/30 kHz*	55 dB	
	Analog @ 12.5 kHz	50 dB	
Audio Distortion		Less than 1 % at 1000 Hz	
Emission Designator		16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

## APPLICABLE MIL-STD

MIL Standard	MIL 810C/D/E/F Methods/Procedures	MIL 810G Methods/Procedures
High Temperature	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502.4/Procedure I	502.5/Procedure II
Temperature Shock	503.4/Procedure I, II	503.5/Procedure I

## JVCKENWOOD USA Corporation

Communications Sector Headquarters

3970 Johns Creek Court, Suite 100, Suwanee, GA 30024-1265

### Order Administration/Distribution

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745



<http://nexedge.kenwood.com>



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Communications Systems Business Unit  
JVCKENWOOD Corporation